ATTACHMENT B TO RESOLUTION NO.

ANALYTES TO BE MONITORED FOR INJECTION WATER QUALITY CHARACTERIZATION REPORT FOR CITY OF TRACY DEMONSTRATION PHASE AQUIFER STORAGE AND RECOVERY PROJECT

SAN JOAQUIN COUNTY

The following is a list of analytes to be monitored in conjunction with the *Injection Water Quality Characterization Report*. At a minimum, two representative samples of the treated water proposed for aquifer injection and two groundwater samples collected from the ASR Demonstration Well shall be collected for this report. Water quality characterization monitoring shall include at least the following:

		Type of	Minimum Number
Constituent	<u>Units</u>	<u>Sample</u>	of Samples
pH	std.	Grab	Two from each medium
Dissolved Organic Carbon	mg/l	Grab	Two from each medium
Total Kjeldahl Nitrogen	mg/L	Grab	Two from each medium
Total Dissolved Solids	mg/L	Grab	Two from each medium
Standard Minerals ¹	mg/l	Grab	Two from each medium
Chlorine Residual	mg/L	Grab	Two from each medium
Ammonia Nitrogen	mg/L	Grab	Two from each medium
Boron	mg/L	Grab	Two from each medium
Fluoride	mg/L	Grab	Two from each medium
Iron	mg/L	Grab	Two from each medium
Manganese	mg/L	Grab	Two from each medium
Molybdenum	mg/L	Grab	Two from each medium
Anion Scan ² (EPA 300)	mg/l	Grab	Two from each medium
Trace Metals ³ (EPA 6010B)	mg/l	Grab	Two from each medium
Antimony (EPA 7062)	mg/l	Grab	Two from each medium
Arsenic (EPA 7062)	mg/l	Grab	Two from each medium
Cadmium (EPA 7131A)	mg/l	Grab	Two from each medium
Lead (EPA 7421)	mg/l	Grab	Two from each medium
Mercury (EPA 7471A)	mg/l	Grab	Two from each medium
Nickel (EPA 7521)	mg/l	Grab	Two from each medium
Selenium (EPA 7742)	mg/l	Grab	Two from each medium
Thallium (EPA 7841)	mg/l	Grab	Two from each medium

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		Type of	Minimum Number
Constituent	<u>Units</u>	<u>Sample</u>	of Samples
Trihalomethanes ⁴	mg/L	Grab	Two from each medium
(EPA 8260B)			
Haloacetic Acids ⁴	mg/L	Grab	Two from each medium
(EPA 8260B)			
Volatile organics ⁵ (EPA	mg/L	Grab	Two from each medium
8260B)	mg/L		
Semi-volatile organics ⁵	mg/L	Grab	Two from each medium
(EPA 8270C)	IIIg/ L		
Organochlorine Pesticides ⁵	mg/l	Grab	Two from each medium
(EPA 8141A)	1118/1		
N-Nitrosodimethylamine ⁶	mg/L	Grab	Two from each medium
Total Coliform Organisms ⁷	MPN/	Grab	Two from each medium
Total Comorni Organisms	100 ml		

Standard Minerals shall include the following: calcium, magnesium, potassium, sodium, total alkalinity (including alkalinity series), and hardness.

jrm: 8/05/2004

² Anion scan shall include the following: bromide, chloride, nitrate, nitrite, phosphate, sulfate, sulfate.

³ Trace metal scan shall include the following: barium, beryllium, chromium, cobalt, copper, silver, tin, vanadium, zinc.

⁴ Individual trihalomethanes and haloacetic acid concentrations shall be monitored and reported.

⁵ All analytical peaks shall be identified and their concentrations reported.

⁶ Using California DHS approved sampling and analysis methods.

⁷ Using a minimum of 15 tubes or three dilutions